Federal Aviation Administration, DOT

- (3) Give the aircraft owner a maintenance release signed by an authorized representative of the repair station and incorporating the following information:
- (i) Identity of the aircraft, airframe, aircraft engine, propeller or appliance.
- (ii) If an aircraft, the make, model, serial number, nationality and registration marks, and location of the repaired area.
- (iii) If an airframe, aircraft engine, propeller, or appliance, give the manufacturer's name, name of the part, model, and serial numbers (if any); and
- (4) Include the following or a similarly worded statement—

"The aircraft, airframe, aircraft engine, propeller, or appliance identified above was repaired and inspected in accordance with current Regulations of the Federal Aviation Agency and is approved for return to service.

Pertinent details of the repair are on file at this repair station under Order No. ——,

Date ____ Signed ___

For signature of authorized representative)

Repair station name) (Certificate No.)

(Address)

- (c) For a major repair or major alteration made by a person authorized in §43.17, the person who performs the major repair or major alteration and the person authorized by §43.17 to approve that work shall execute a FAA Form 337 at least in duplicate. A completed copy of that form shall be—
- (1) Given to the aircraft owner; and
- (2) Forwarded to the Federal Aviation Administration, Aircraft Registration Branch, Post Office Box 25082, Oklahoma City, Okla. 73125, within 48 hours after the work is inspected.
- (d) For extended-range fuel tanks installed within the passenger compartment or a baggage compartment, the person who performs the work and the person authorized to approve the work by §43.7 of this part shall execute an FAA Form 337 in at least triplicate. One (1) copy of the FAA Form 337 shall be placed on board the aircraft as specified in §91.417 of this chapter. The remaining forms shall be distributed as required by paragraph (a)(2) and (3) or (c)(1) and (2) of this paragraph as appropriate.

(Secs. 101, 610, 72 Stat. 737, 780, 49 U.S.C. 1301, 1430)

[Doc. No. 1993, 29 FR 5451, Apr. 23, 1964, as amended by Amdt. 43–10, 33 FR 15989, Oct. 31, 1968; Amdt. 43–29, 52 FR 34101, Sept. 9, 1987; Amdt. 43–31, 54 FR 34330, Aug. 18, 1989]

APPENDIX C TO PART 43 [RESERVED]

APPENDIX D TO PART 43—SCOPE AND DETAIL OF ITEMS (AS APPLICABLE TO THE PARTICULAR AIRCRAFT) TO BE INCLUDED IN ANNUAL AND 100-HOUR INSPECTIONS

- (a) Each person performing an annual or 100-hour inspection shall, before that inspection, remove or open all necessary inspection plates, access doors, fairing, and cowling. He shall thoroughly clean the aircraft and aircraft engine.
- (b) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the fuselage and hull group:
- (1) Fabric and skin—for deterioration, distortion, other evidence of failure, and defective or insecure attachment of fittings.
- (2) Systems and components—for improper installation, apparent defects, and unsatisfactory operation.
- (3) Envelope, gas bags, ballast tanks, and related parts—for poor condition.
- (c) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the cabin and cockpit group:
- (1) Generally—for uncleanliness and loose equipment that might foul the controls.
- (2) Seats and safety belts—for poor condition and apparent defects.
- (3) Windows and windshields—for deterioration and breakage.
- (4) Instruments—for poor condition, mounting, marking, and (where practicable) improper operation.
- (5) Flight and engine controls—for improper installation and improper operation.
- (6) Batteries—for improper installation and improper charge.
- (7) All systems—for improper installation, poor general condition, apparent and obvious defects, and insecurity of attachment.
- (d) Each person performing an annual or 100-hour inspection shall inspect (where applicable) components of the engine and nacelle group as follows:
- (1) Engine section—for visual evidence of excessive oil, fuel, or hydraulic leaks, and sources of such leaks.
- (2) Studs and nuts—for improper torquing and obvious defects.
- (3) Internal engine—for cylinder compression and for metal particles or foreign matter on screens and sump drain plugs. If there is weak cylinder compression, for improper internal condition and improper internal tolerances.
- (4) Engine mount—for cracks, looseness of mounting, and looseness of engine to mount.
- (5) Flexible vibration dampeners—for poor condition and deterioration.
- (6) Engine controls—for defects, improper travel, and improper safetying.

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- (7) Lines, hoses, and clamps—for leaks, improper condition and looseness.
- (8) Exhaust stacks—for cracks, defects, and improper attachment.
- (9) Accessories—for apparent defects in security of mounting.
- (10) All systems—for improper installation, poor general condition, defects, and insecure attachment.
 - (11) Cowling-for cracks, and defects.
- (e) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the landing gear group:
- (1) All units—for poor condition and insecurity of attachment.
- (2) Shock absorbing devices—for improper oleo fluid level.
- (3) Linkages, trusses, and members—for undue or excessive wear fatigue, and distortion.
- (4) Retracting and locking mechanism—for improper operation.
 - (5) Hydraulic lines—for leakage.
- (6) Electrical system—for chafing and improper operation of switches.
- (7) Wheels—for cracks, defects, and condition of bearings.
 - (8) Tires—for wear and cuts.
 - (9) Brakes—for improper adjustment.
- (10) Floats and skis—for insecure attachment and obvious or apparent defects.
- (f) Each person performing an annual or 100-hour inspection shall inspect (where applicable) all components of the wing and center section assembly for poor general condition, fabric or skin deterioration, distortion, evidence of failure, and insecurity of attachment.
- (g) Each person performing an annual or 100-hour inspection shall inspect (where applicable) all components and systems that make up the complete empennage assembly for poor general condition, fabric or skin deterioration, distortion, evidence of failure, insecure attachment, improper component installation, and improper component operation.
- (h) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the propeller group:
- (1) Propeller assembly—for cracks, nicks, binds, and oil leakage.
- $\ensuremath{\text{(2)}}$ Bolts—for improper torquing and lack of safetying.
- (3) Anti-icing devices—for improper operations and obvious defects.
- (4) Control mechanisms—for improper operation, insecure mounting, and restricted travel.
- (i) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the radio group:

- (1) Radio and electronic equipment—for improper installation and insecure mounting.
- (2) Wiring and conduits—for improper routing, insecure mounting, and obvious defects.
- (3) Bonding and shielding—for improper installation and poor condition.
- (4) Antenna including trailing antenna—for poor condition, insecure mounting, and improper operation.
- (j) Each person performing an annual or 100-hour inspection shall inspect (where applicable) each installed miscellaneous item that is not otherwise covered by this listing for improper installation and improper operation.

APPENDIX E TO PART 43—ALTIMETER SYSTEM TEST AND INSPECTION

Each person performing the altimeter system tests and inspections required by §91.411 shall comply with the following:

- (a) Static pressure system:
- (1) Ensure freedom from entrapped moisture and restrictions.
- (2) Determine that leakage is within the tolerances established in $\S 23.1325$ or $\S 25.1325$, whichever is applicable.
- (3) Determine that the static port heater, if installed, is operative.
- (4) Ensure that no alterations or deformations of the airframe surface have been made that would affect the relationship between air pressure in the static pressure system and true ambient static air pressure for any flight condition
 - (b) Altimeter:
- (1) Test by an appropriately rated repair facility in accordance with the following subparagraphs. Unless otherwise specified, each test for performance may be conducted with the instrument subjected to vibration. When tests are conducted with the temperature substantially different from ambient temperature of approximately 25 degrees C., allowance shall be made for the variation from the specified condition.
- (i) Scale error. With the barometric pressure scale at 29.92 inches of mercury, the altimeter shall be subjected successively to pressures corresponding to the altitude specified in Table I up to the maximum normally expected operating altitude of the airplane in which the altimeter is to be installed. The reduction in pressure shall be made at a rate not in excess of 20,000 feet per minute to within approximately 2,000 feet of the test point. The test point shall be approached at a rate compatible with the test equipment. The altimeter shall be kept at the pressure corresponding to each test point for at least 1 minute, but not more than 10 minutes, before a reading is taken. The error at all test points must not exceed the tolerances specified in Table I.